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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,257	01/16/2004	Ray C. Smith	2001-IP-004235 UIP1 USA	6918
32376	7590	09/27/2005	EXAMINER SMITH, MATTHEW J	
LAWRENCE R. YOUST DANAMRAJ & YOUST, P.C. 5910 NORTH CENTRAL EXPRESSWAY SUITE 1450 DALLAS, TX 75206			ART UNIT 3672	PAPER NUMBER

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,257

Applicant(s)

SMITH, RAY C.

Examiner

Matthew J. Smith

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11Jun04&28Mar05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first casing expanded (claim 24) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Simpson (6457532).

Simpson discloses a monobore wellbore, figures 16a, b, comprising: a first casing 202 positioned within the wellbore, the first casing having a first inner diameter and a lap region in a downhole end; a second casing 200 positioned within the wellbore such that an uphole end of the second casing is positioned within the lap region of the first casing, the second casing having a second inner diameter that is substantially the same as the first inner diameter, the uphole end of the second casing being coupled to the lap region of the first casing when the first and second casings are positioned within the wellbore; wherein the uphole end of the second casing forms a mechanical connection, forms a hydraulic seal, is plastically deformed connection by a plastic deformation process, forms a metal-to-metal seal, and is a physically deformed connection, at 204, with the lap region of the first casing; a crimping member 100 used to radially expand the uphole end of the second casing into the lap region of the first casing; a elastomeric sealing material 210 positioned between the uphole end of the

Art Unit: 3672

second casing and the lap region of the first casing; the first casing expanded to the first inner diameter when the first casing is positioned within the wellbore; the lap region of the first casing having a third inner diameter that is larger than the first inner diameter; the lap region of the first casing expanded to the third inner diameter when the first casing is positioned within the wellbore; the second casing passed through the first casing prior to coupling the first and second casing together; and the second casing expanded to the second inner diameter when the second casing is positioned within the wellbore.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-18 and 24-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cumming et al. (6070671).

Cumming et al. disclose, in figure 4, a monobore multilateral wellbore comprising: a first casing 17 positioned within a main wellbore, the first casing having a first diameter, a lap region, figure 2, and a window, figure 4; a second casing 21 positioned within a branch wellbore such that an uphole end of the second casing extends through the window into the lap region of the first casing, the second casing having a second

Art Unit: 3672

inner diameter that is substantially the same as the first inner diameter, the uphole end of the second casing being coupled to the first casing when the first and second casings are positioned within the multilateral wellbore; the uphole end of the second casing forms a mechanical connection and a hydraulic seal, is physically deformed by a plastic deformation process, and forms a metal-to-metal seal with the lap region of the first casing; the lap region of the first casing has a third inner diameter that is larger than the first inner diameter; the lap region of the first casing is expanded to the third inner diameter when the first casing is positioned within the multilateral wellbore; the second casing passed through the first casing prior to coupling the first and second casings together; the second casing expanded to the second inner diameter when the second casing is positioned within the multilateral wellbore.

This reference also discloses a monobore wellbore of adjoining wellbores comprising: a first casing 17 positioned within a first wellbore, the first casing having a first inner diameter and a lap region; and a second casing 21 positioned within a second wellbore that adjoins the first wellbore such that a downhole end of the second casing is positioned within the lap region, figure 2, of the first casing, the second casing having a second inner diameter that is substantially the same as the first inner diameter, the downhole end of the second casing being coupled to the first casing when the first casing is positioned within the first wellbore and the second casing is positioned within the second wellbore, figure 4; the downhole end of the second casing forms a mechanical connection and a hydraulic seal, is physically deformed by a plastic deformation process with the lap region of the first casing; the second casing intersects

Art Unit: 3672

the first casing through a window, figure 4, in the first casing forming a junction; the first casing is a main wellbore casing of a multilateral wellbore; the first casing is a branch wellbore casing of a multilateral wellbore; the second casing is a main wellbore casing of a multilateral wellbore; the second casing is a branch wellbore casing of a multilateral wellbore; the first and second casings are main wellbore casings, figure 2, of multilateral wellbores; the first casing is a main wellbore casing and second casing is a branch wellbore casing of multilateral wellbores; the first casing is a branch wellbore casing and second casing is a main wellbore casings of multilateral wellbores.

This reference further discloses a method of forming a connection between adjoining wellbores, figure 4, comprising the steps of: installing a first casing 17 within a first wellbore, the first casing having a first inner diameter and a lap region; installing a second casing 21 within a second wellbore that adjoins the first wellbore such that a downhole end of the second casing is positioned within the lap region of the first casing, the second casing having a second inner diameter that is substantially the same as the first inner diameter; and coupling the downhole end of the second casing to the first casing downhole; the coupling step further comprises forming a mechanical connection and a hydraulic seal of, is physically deforming, is plastically deforming the second casing end and the lap region of the first casing; installing a second casing step further comprises intersecting the second casing with the first casing through a window in the first casing forming a junction; installing a main wellbore casing in a multilateral wellbore; installing a branch wellbore casing, figure 4, in a multilateral wellbore;

Art Unit: 3672

installing a main wellbore casing of a multilateral wellbore; installing a branch wellbore casing in a multilateral wellbore.

This reference does not disclose the branch wellbore casing connected at a lap region, the first casing is expanded to the first inner diameter when the first casing is positioned within the multilateral wellbore, or the first and second casings are branch wellbore casings of multilateral wellbores.

While the reference does not specifically disclose the branch wellbore casing connected at a lap region, the reference can reasonably be interpreted to suggest connecting the branch at a lap region. Thus it would have been obvious to a person having ordinary skill in the art at the time the invention was made to connect the branch wellbore casing in a lap region of the first casing in order to maintain the monobore. Further it would have been obvious to expand the first casing to a first inner diameter when the first casing is positioned within the multilateral wellbore, and the first and second casings are branch wellbore casings of multilateral wellbores since it is well known to expand casing and connecting one branch or multiple branches requires the same steps.

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cumming et al in view of Simpson.

Cumming et al. disclose connecting casing, straight or branched, and can be reasonably interpreted to suggest connecting the branch wellbore casing in a lap region but not a crimping member is used to radially expand the uphole end of the second casing into the lap region of the first casing, an elastomeric sealant sealing material positioned between the uphole end of the second casing and the lap region of the first casing.

Simpson presents a crimping member 100 used to radially expand the uphole end of the second casing into the lap region of the first casing and an elastomeric sealant sealing material 210 positioned between the uphole end of the second casing and the lap region of the first casing.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to crimp the connection and use an elastomeric seal in order to make the connection stronger and fluid tight.

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cumming et al in view of Brunet (6209644).

Cumming et al. disclose connecting casing, straight and branch, and can be reasonably interpreted to suggest connecting the branch wellbore casing in a lap region but not the window being pre-milled or cut through the first casing by milling.

Brunet shows the window milled (col. 11, line 8) or cut (col. 11, line 26) through the first casing by milling.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to mill or cut the window in the Cumming et al wellbore since it is well known.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cook et al. (6557640, 20040262014) and Cook (20050173108) describe a monobore wellbore.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Smith whose telephone number is 571-272-7034. The examiner can normally be reached on T-F, 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David Bagnell
Supervisory Patent Examiner
Art Unit 3672

MJS *MJS*
16 September 2005